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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,328	03/02/2001	Konstantinos Poulakis	41172	8449

7590 10/06/2003

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EXAMINER	
GOFF II, JOHN L	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/786,328	POULAKIS, KONSTANTINOS	
	Examiner	Art Unit	
	John L. Goff	1733	

-- The MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 September 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 2, lines 21-22 of paper no. 9, filed 9/4/03, with respect to the rejection(s)of claim(s) 12, 18, 21, 22, 26, and 27 under 35 U.S.C. 102(b) as being anticipated by Banfield et al. (U.S. Patent 5,286,431) have been fully considered and are persuasive. It is noted that while the examiner agrees with applicant that the fastener taught by Banfield et al. is not a fleece, Banfield et al. do teach the fastener has a fleece layer (see 6 of Figure 1 and Column 8, line 68 and Column 9, lines 1-3) and thus, claims 12, 18, 26, and 27 remain rejected over Banfield. However, regarding dependent claims 13 and 14 the previous rejection is withdrawn, and a new ground(s) of rejection is made in view of the interpretation that the fastener taught by Banfield is not a fleece. Additionally, a new rejection is made over the claims in view of newly found prior art reference(s).

2. Applicant's arguments with respect to claims 12-27 have been considered but are moot in view of the new ground(s) of rejection.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

4. Claims 12, 18, 26, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Banfield et al. (U.S. Patent 5,286,431).

Banfield et al. are directed to producing a molded product having a fastener. Banfield et al. teach a fastener having a layer of fleece, i.e. a nonwoven, having a ferromagnetic coating thereon wherein the coating extends across an entire surface of the fastener. Banfield et al. teach the ferromagnetic coating comprises polyurethane, ferromagnetic material such as iron oxide powder, and solvent. Banfield et al. teach applying the ferromagnetic coating onto the fastener using a knife coater followed by drying the coated fastener. Banfield et al. teach attaching the fastener to a molded foam product by placing the fastener on a wall of a mold, producing a magnetic field to hold the fastener in position on the wall of the mold, molding a foam element in the mold, and removing the molded foam element with embedded fastener on its surface wherein the ferromagnetic coating is on a surface of the fastener opposite the molded foam (Figures 11-15 and Column 1, lines 9-17 and Column 5, lines 42-47 and Column 6, lines 14-18 and Column 7, lines 5-11, 13-17, 34-37, 41-42, 47-52, 55-57, and 66-68 and Column 8, lines 1-2 and 66-68). It is noted the claims do not require the ferromagnetic coating to be applied directly onto the fleece layer and as such Banfield et al. teach anticipates claims 12, 18, 21, 22, 26, and 27.

Claim Rejections - 35 USC § 103

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Banfield et al.

The teachings of Banfield et al. are shown above in paragraph 3. However, while Banfield et al. teach applying the ferromagnetic coating using well known techniques such as knife coating and calender coating and Banfield et al. are not limited to any particular method of coating, Banfield et al. are silent as to applying the ferromagnetic coating by nozzle coating. It would have been well within the purview of one of ordinary skill in the art at the time the invention was made to apply the ferromagnetic coating taught by Banfield et al. in any conventional manner well known in the art such as nozzle coating as only the expected results would be achieved.

6. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banfield et al. as applied above in paragraph 3, and further in view of Von et al. (EP 457226 and English abstract).

Regarding claims 13 and 14, Banfield et al. are silent as to all materials useful as the fleece layer, such as polyester. Further, Banfield et al. are silent as to the specific amount of polyester and the amount of ferromagnetic coating applied. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the fleece from a polyester such as PET as it was well known in the art to form a fleece used in a molding process from these materials as they are easily shaped and molded as shown for example by Von et al. As to the amount of polyester and the amount of ferromagnetic coating, one of ordinary skill in the art at the time the invention was made would have readily experimentally determined these amounts, i.e. using enough of the polyester to result in sufficient embedding of the fastener and

using enough of the ferromagnetic coating to prevent the foam from fouling the fastener, as doing so would require nothing more than ordinary skill and routine experimentation.

Regarding claims 15-17, Banfield et al. teach the ferromagnetic coating comprises polyurethane, ferromagnetic material such as iron oxide powder, and solvent. One of ordinary skill in the art at the time the invention was made would have readily experimentally determined the optimum amounts and specific types of each material to provide an adequate coating, i.e. one that prevents fouling of the fastener, as doing so would have required nothing more than ordinary skill and routine experimentation.

Von et al. disclose textile fleece materials that are high strength ,low weight, and can be shaped and molded easily. Von et al. teach the fleece is formed from polyester fibers, preferable PET (See abstract).

7. Claims 20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banfield et al. as applied above in paragraph 3, and further in view of Persoon (U.S. Patent 2,909,442) and Chebiniak (U.S. Patent 3,497,411).

Banfield et al. teach all of the limitations in claims 20 and 23-25 as applied above except for a teaching on using a transfer ribbon to apply the ferromagnetic coating to the fastener. However, it would have been well within the purview of one of ordinary skill in the art at the time the invention was made to apply the ferromagnetic coating taught by Banfield et al. using a transfer ribbon as it was well known in the art to use a transfer ribbon to apply a coating to a substrate as a means for controlling the width and thickness of the coating as shown for example by Persoon and Chebiniak.

Persoon is directed to applying a magnetic coating to a film. Persoon teaches applying the coating to a transfer carrier ribbon, laminating the transfer ribbon to the film using heat and pressure, and separating the ribbon and film to obtain a film with a magnetic coating of a desired thickness and width (Figures 1-3 and column 1, lines 43-48 and 55-57 and Column 2, lines 18-62). Chebiniak is directed to applying a magnetic coating to a substrate. Chebiniak teaches applying the coating to a transfer carrier substrate, laminating the transfer substrate to the end use substrate using heat and pressure, and separating the two substrates to obtain a substrate with a smooth magnetic coating. Chebiniak further teaches that the carrier substrate may incorporate a silicon lubricating substance (Column 1, lines 15-26, 37-38, 51,52, and 63-64 and Column 2, lines 11-14, 45-50, and 55-60 and Column 3, lines 68-73).

8. Claims 12, 18, 19, 21, 22, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Specification page 2, paragraph 1) in view of Banfield et al. and Harada (JP 386102 and English abstract).

The admitted prior art discloses a method for forming a foam padding seat comprising a barrier layer and foam wherein the seat is formed by placing a barrier layer into a mold and foaming onto the back of the barrier layer such that the barrier layer is embedded. The admitted prior art teaches that the barrier layer simplifies removal of the foam element from the mold and prevents caking or baking of the foam onto the mold in the area of the barrier layer. The admitted prior art notes that during foaming there is a danger of the barrier layer being displaced leading to surface defects in the foam element produced. It would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the entire outer surface of the barrier layer taught by the admitted prior art with a ferromagnetic coating as it was well

technique in the art for securing a barrier layer to a mold provided with magnets to prevent the barrier layer from being displaced during molding as shown for example by Banfield et al. It is noted the admitted prior art is silent as to the materials used to form the barrier layer. However, the admitted prior art is not limited to any particular materials. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the barrier layer taught by the admitted prior art a fleece, e.g. woven or nonwoven fabric, as it was well known in the art to form a barrier layer from these materials when the barrier layer is used to prevent the injected foam from fouling the mold as shown for example by Harada.

Regarding claims 18, 21, and 22 it is noted Banfield et al. teach applying the ferromagnetic coating onto the fastener using a knife coater followed by drying the coated fastener such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the ferromagnetic coating onto the fleece taught by the admitted prior art as modified by Banfield et al. and Harada using this method as only the expected results would be achieved.

Regarding claim 19, it is noted the admitted prior art as modified by Banfield et al. and Harada are silent as to applying the ferromagnetic coating by nozzle coating. However, the admitted prior art as modified by Banfield et al. and Harada are not limited to any particular method, and it would have been well within the purview of one of ordinary skill in the art at the time the invention was made to apply the ferromagnetic coating taught by the admitted prior art as modified by Banfield et al. and Harada in any conventional manner well known in the art such as nozzle coating as only the expected results would be achieved.

Banfield et al. are directed to producing a molded product having a fastener. Banfield et al. teach a fastener having a layer of fleece, i.e. a nonwoven layer, having a ferromagnetic coating thereon wherein the coating extends across an entire surface of the fastener. Banfield et al. teach the ferromagnetic coating comprises polyurethane, ferromagnetic material such as iron oxide powder, and solvent. Banfield et al. teach applying the ferromagnetic coating onto the fastener using a knife coater followed by drying the coated fastener. Banfield et al. teach attaching the fastener to a molded foam product by placing the fastener on a wall of a mold, producing a magnetic field to hold the fastener in position on the wall of the mold, molding a foam element in the mold, and removing the molded foam element with embedded fastener on its surface wherein the ferromagnetic coating is on a surface of the fastener opposite the molded foam (Figures 11-15 and Column 1, lines 9-17 and Column 5, lines 42-47 and Column 6, lines 14-18 and Column 7, lines 5-11, 13-17, 34-37, 41-42, 47-52, 55-57, and 66-68 and Column 8, lines 1-2 and 66-68). Harada discloses a process of injection molding a resin foam onto a barrier layer. Harada teaches the barrier layer prevents the injected foam from fouling the mold, and Harada further teaches the barrier layer is formed from woven, nonwoven, or knitted cloth (See abstract).

9. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art, Banfield et al., and Harada as applied above in paragraph 8, and further in view of Von et al.

Regarding claims 13 and 14, the admitted prior art as modified by Banfield et al. and Harada are silent as to all materials useful as the fleece layer, such as polyester. Further, the admitted prior art as modified by Banfield et al. and Harada are silent as to the specific amount

of polyester and the amount of ferromagnetic coating applied. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the fleece from a polyester such as PET as it was well known in the art to form a fleece used in a molding process from these materials as they are easily shaped and molded as shown for example by Von et al. As to the amount of polyester and the amount of ferromagnetic coating, one of ordinary skill in the art at the time the invention was made would have readily experimentally determined these amounts, i.e. using enough of the polyester to result in sufficient embedding of the fastener and using enough of the ferromagnetic coating to prevent the foam from fouling the fastener, as doing so would require nothing more than ordinary skill and routine experimentation.

Regarding claims 15-17, the admitted prior art as modified by Banfield et al. and Harada teach the ferromagnetic coating comprises polyurethane, ferromagnetic material such as iron oxide powder, and solvent. One of ordinary skill in the art at the time the invention was made would have readily experimentally determined the optimum amounts and specific types of each material to provide an adequate coating, i.e. one that prevents fouling of the mould, as doing so would have required nothing more than ordinary skill and routine experimentation.

Von et al. disclose textile fleece materials that are high strength ,low weight, and can be shaped and molded easily. Von et al. teach the fleece is formed from polyester fibers, preferable PET (See abstract).

10. Claims 20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art, Banfield et al., and Harada as applied above in paragraph 8, and further in view of Persoon and Chebiniak.

The admitted prior art, Banfield et al., and Harada teach all of the limitations in claims 20 and 23-25 as applied above except for a teaching on using a transfer ribbon to apply the ferromagnetic coating to the fastener. However, it would have been well within the purview of one of ordinary skill in the art at the time the invention was made to apply the ferromagnetic coating taught by the admitted prior art as modified by Banfield et al. and Harada using a transfer ribbon as it is well known in the art to use a transfer ribbon to apply a coating to a substrate as a means for controlling the width and thickness of the coating as shown for example by Persoon and Chebiniak.

Persoon is directed to applying a magnetic coating to a film. Persoon teaches applying the coating to a transfer carrier ribbon, laminating the transfer ribbon to the film using heat and pressure, and separating the ribbon and film to obtain a film with a magnetic coating of a desired thickness and width (Figures 1-3 and column 1, lines 43-48 and 55-57 and Column 2, lines 18-62). Chebiniak is directed to applying a magnetic coating to a substrate. Chebiniak teaches applying the coating to a transfer carrier substrate, laminating the transfer substrate to the end use substrate using heat and pressure, and separating the two substrates to obtain a substrate with a smooth magnetic coating. Chebiniak further teaches that the carrier substrate may incorporate a silicon lubricating substance (Column 1, lines 15-26, 37-38, 51,52, and 63-64 and Column 2, lines 11-14, 45-50, and 55-60 and Column 3, lines 68-73).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

John L. Goff
September 26, 2003

Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700